# CHROMA ATE INC.

## 2015.4Q Investor Conference

**23rd February, 2016**

# Disclaimer

Chroma

This presentation contains some forward-looking statements that are subject to substantial risks and uncertainties. Typically, these statements contain words such as "anticipate", "believe", "could", "estimate", "expect", "intend", "plan", "forecast", "project", "predict", "potential", "continue", "may", "should", "will", and "would" or similar words. You should consider these forward-looking statements carefully because such statements are only our expectations or projections about future events, and actual results may differ materially from those expressed or implied by such statements. The forward-looking statements in this presentation include, but are not limited to, growth rates for various markets estimated by third party sources, future products and technology development, widespread market acceptance of the hosted delivery model, future revenue growth and profitability. You should be cautioned that the forward-looking statements are no guarantee of our future performance. The forward-looking statements contained in this presentation are made only as of the date of this presentation and we undertake no obligation to update the forward-looking statements to reflect subsequent events or circumstances, except as required by law.
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# Agenda

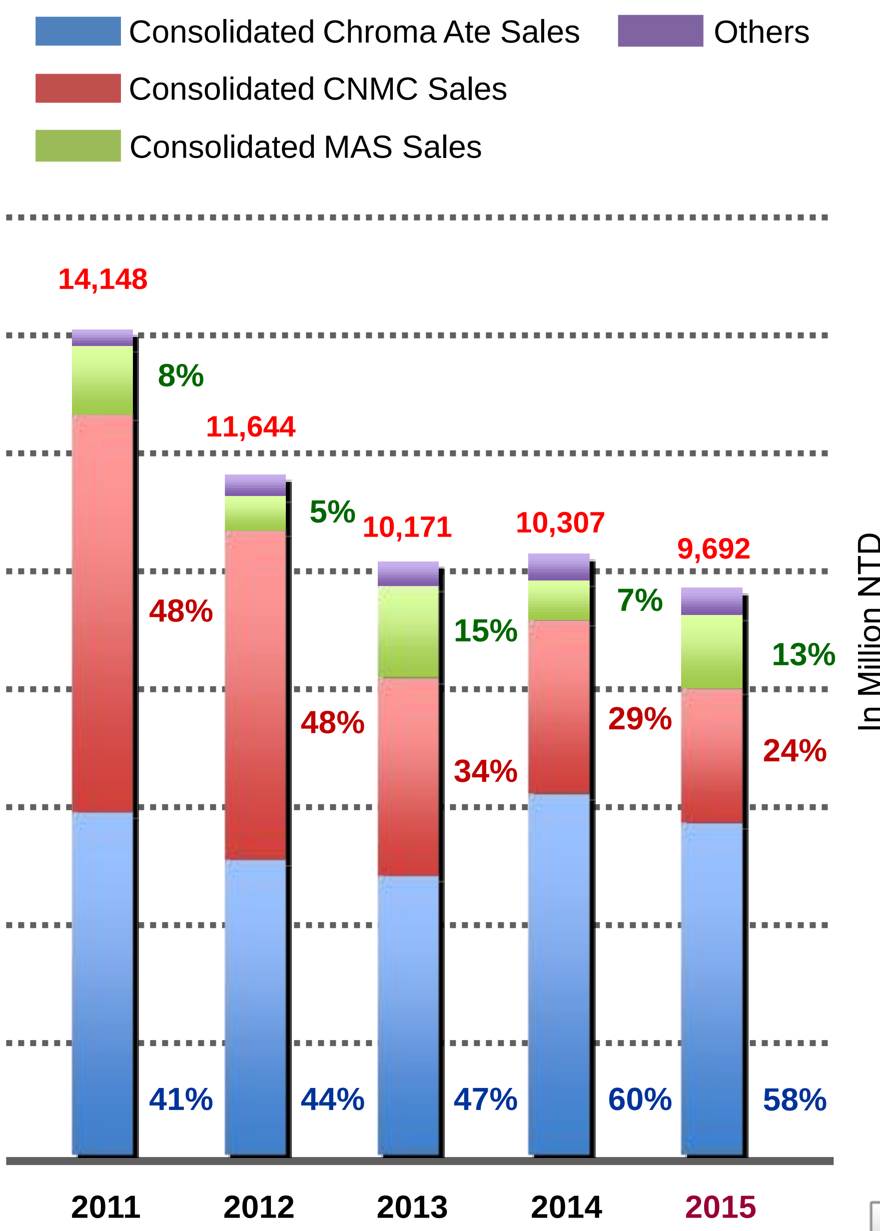
- Corporate Profile
- Financial Review
- Operation Highlights
- Q&A

# CORPORATE

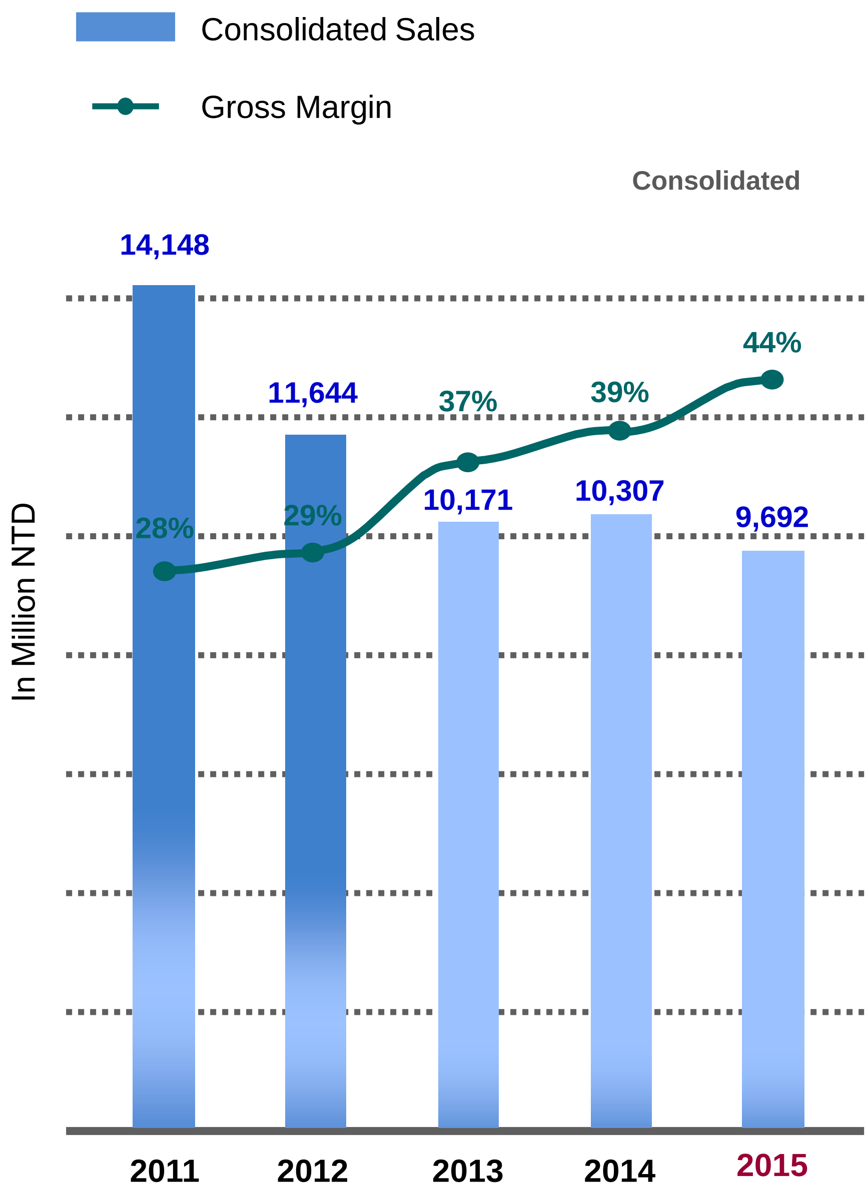
# PROFILE

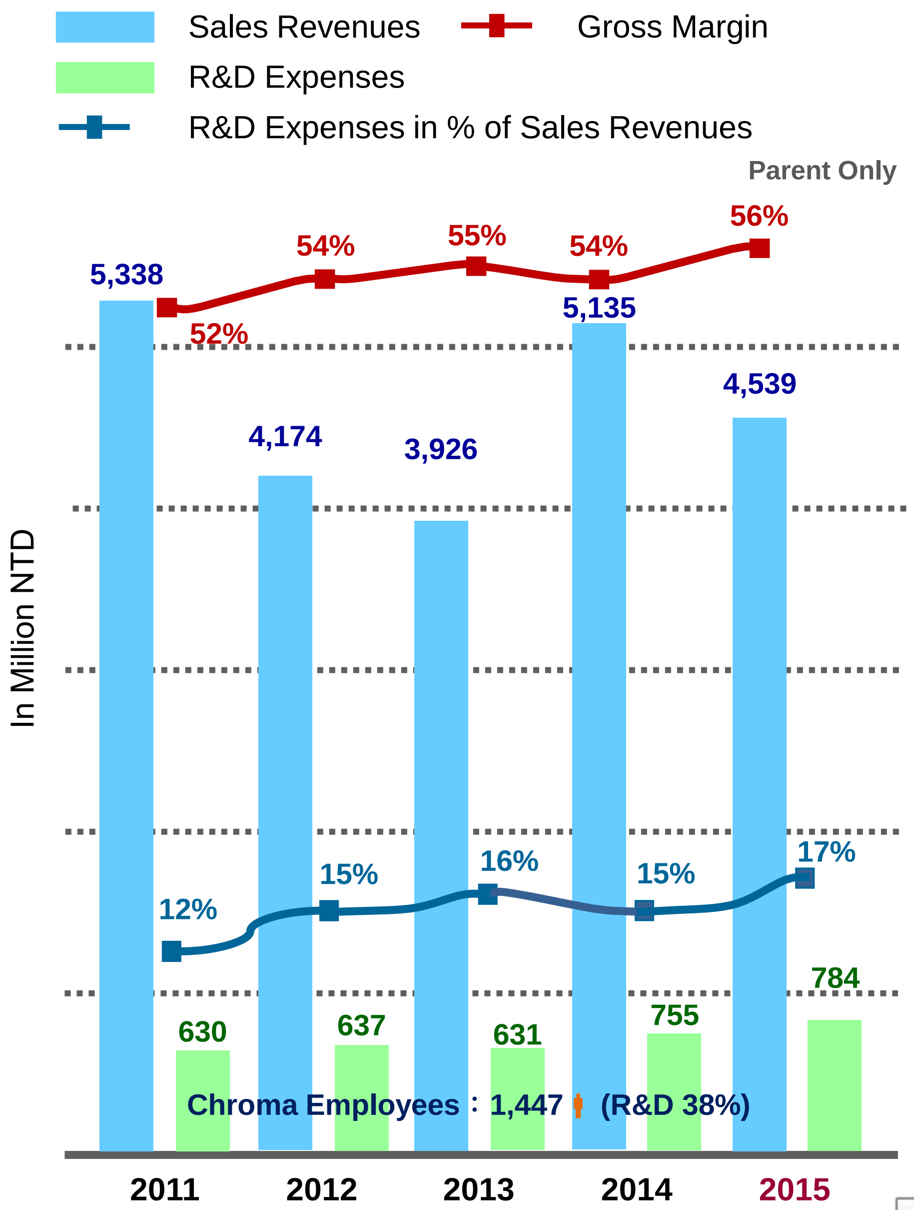
# Corporate Profile

- Chroma Group founded in 1984, a world leading own brand turnkey test & automation solution provider, specialized in electronics test and measurement instruments and ATS (auto test system). Businesses cover test and measurement instruments and ATS for various industries, and a turnkey solution as an integration of Test and Measurement , Automation and MES (manufacturing execution system).
- Key success: Precision, Reliability, Innovation
- Chroma group encompass business unit of Chroma Ate Inc., Modular Assembly System (MAS) and Chroma New Material Corp (CNMC).
- 2015 Consolidated Sales : NT$ 9.69 billion
- 2015 Net Income: NT$1.24 billion
- Chroma Group total of 2,310 employees (as Dec, 2015)



# Financial Performance

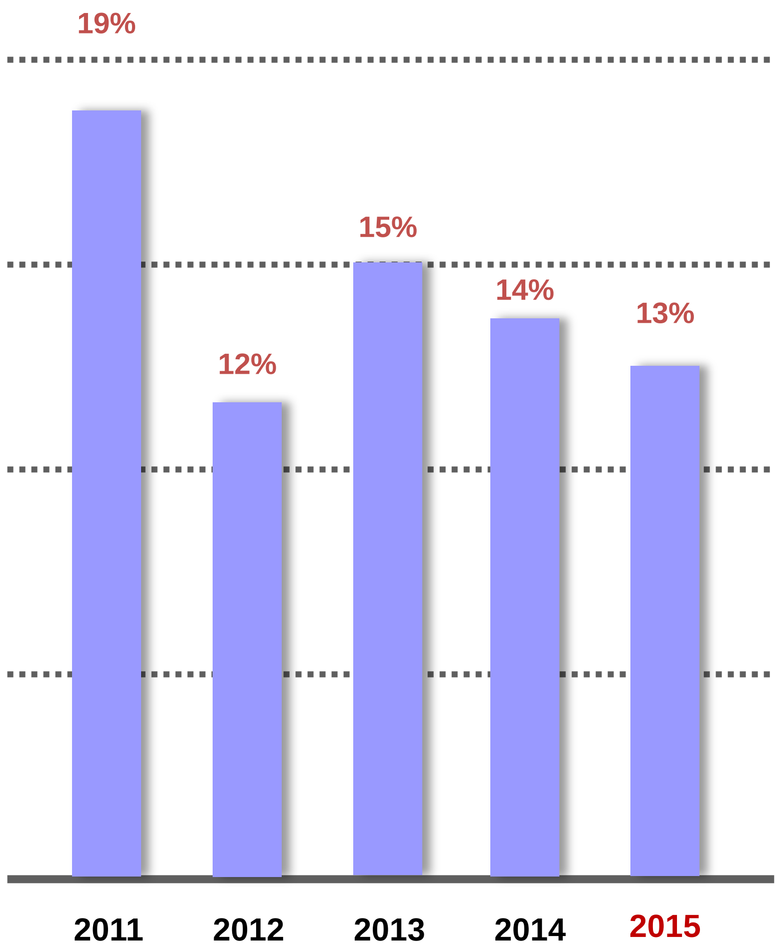


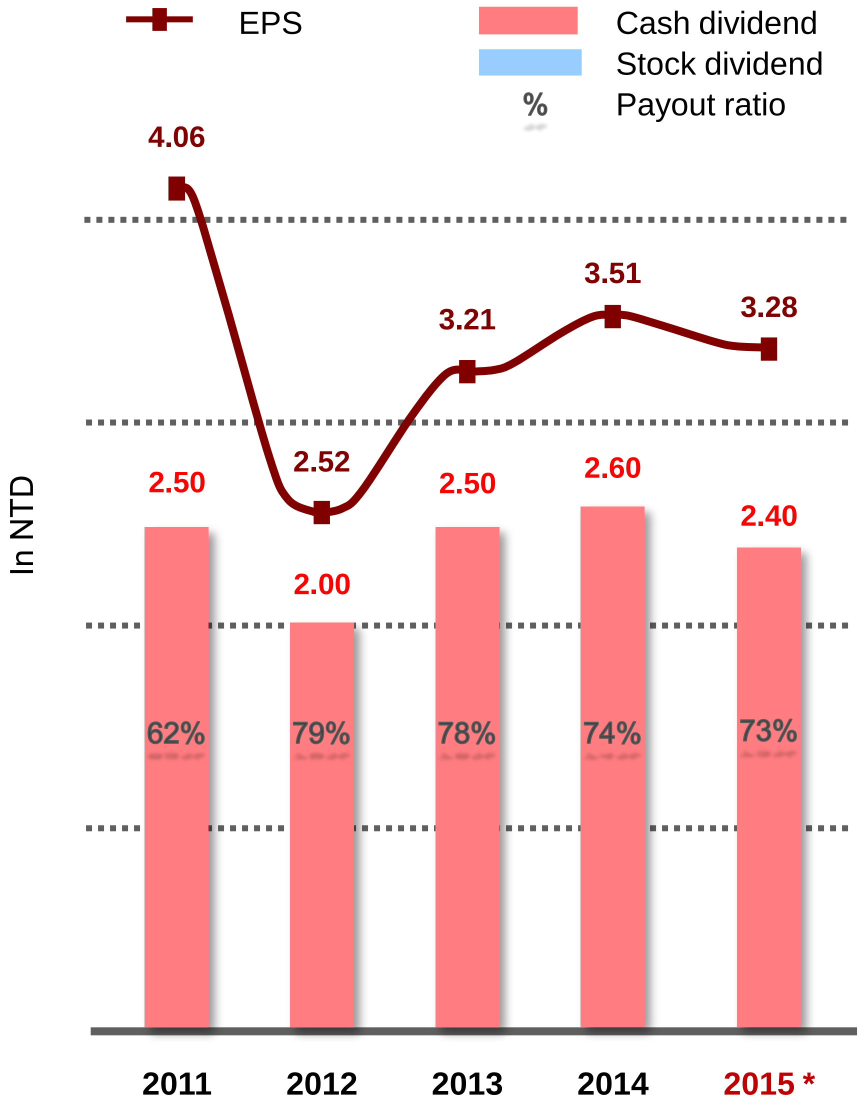
# Financial Performance

Chroma

## ROE




## Dividend




* The dividend will be paid out after the resolutions of Annual General Shareholders meeting.

# Chroma Global Network

Global Employees：2,310, Branch Offices x17, Distributors x68

# FINANCIAL REVIEW

# Year 2015 Condensed Consolidated Income Statement

Chroma

| Condensed Consolidated P&L<br>(In Million NTD, except for EPS in NTD) | 2015 | % | 2014 | % | YoY % |
|---|---|---|---|---|---|
| **Net Sales** | **9,692** | **100%** | **10,307** | **100%** | **(6%)** |
| Consolidated Sales of Testing Equipment Business | 5,666 | 58% | 6,175 | 60% | **(8%)** |
| Consolidated Sales of MAS | 1,261 | 13% | 680 | 7% | **85%** |
| Consolidated Sales of New Material | 2,328 | 24% | 2,983 | 29% | **(22%)** |
| Others | 437 | 5% | 469 | 4% | **(7%)** |
| Cost of Goods Sold | (5,471) | (56%) | (6,261) | (61%) | **(13%)** |
| **Gross Profit** | **4,221** | **44%** | **4,046** | **39%** | **4%** |
| Operating Expenses: | | | | | |
| General & Administration | (2,128) | (22%) | (1,995) | (19%) | **7%** |
| Research & Development | (873) | (9%) | (830) | (8%) | **5%** |
| **Operating Income** | **1,220** | **13%** | **1,221** | **12%** | **-** |
| Non-Operating Income (Expenses), net | 263 | 2% | 302 | 3% | **(13%)** |
| Income (Loss) Before Tax | 1,483 | 15% | 1,523 | 15% | **(3%)** |
| Income Tax | (288) | (3%) | (227) | (2%) | **27%** |
| **Net Income** | **1,195** | **12%** | **1,296** | **13%** | **(8%)** |
| Other Comprehensive Income (Losses) | (132) | (1%) | 5 | - | **n/a** |
| **Comprehensive Income** | **$ 1,063** | **11%** | **$ 1,301** | **13%** | **(18%)** |
| **Net Income (Losses) Attributable To:** | | | | | |
| Shareholders of the Parent | 1,237 | 13% | 1,318 | 13% | **(6%)** |
| Noncontrolling Interests | (42) | (1%) | (22) | - | **91%** |
| | **$ 1,195** | **12%** | **$ 1,296** | **13%** | **(8%)** |
| **EPS (Basic)** | **$ 3.28** | | **$ 3.51** | | **(7%)** |
| **EPS (Diluted)** | **$ 3.10** | | **$ 3.30** | | **(6%)** |

# Balance Sheet Highlights & Financial Ratio

Chroma

| **Consolidated** (In Million NTD) | **2015. Dec** | **2014. Dec** | **+ / - %** |
|---|---|---|---|
| **Balance Sheet Highlights** | | | |
| Cash & Short Term Investments | 5,116 | 4,129 | 24% |
| Inventory | 1,636 | 1,605 | 2% |
| Short Term Debt | 333 | 425 | - 22% |
| Long Term Debt | 3,142 | 2,488 | 26% |
| Shareholders Equity | 9,531 | 9,373 | 2% |
| **Total Assets** | **16,060** | **14,970** | **7%** |
| Inventory Turnover (Day) | 108 | 91 | |
| AR Turnover (Day) | 108 | 108 | |
| AP Turnover (Day) | 91 | 76 | |
| Net Debt to Equity (%) | - | - | |
| **ROE (%)** ● | **13%** | **14%** | |
| **ROA (%)** ● | **8%** | **9%** | |

| **Cash Position** | **2015** | **2014** | **YoY** |
|---|---|---|---|
| EBITDA | 1,853 | 1,856 | - |
| Cash Flow from Operation | 2,269 | 1,228 | 85% |
| **Free Cash Flow** ●● | **1,101** | **(407)** | **n/a** |

● All ROE + ROA has been annualized.

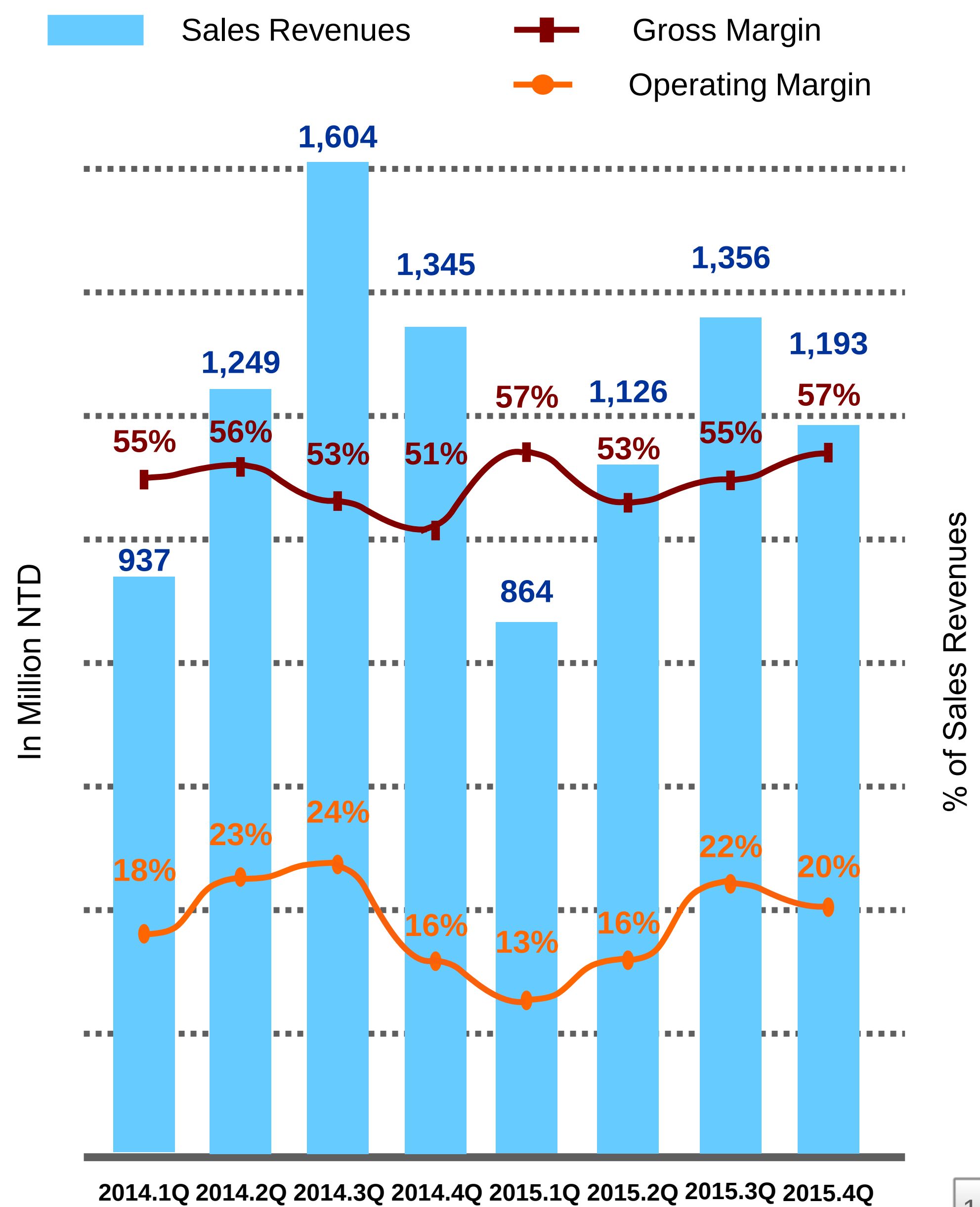
●● Free Cash Flow = Net Cash Provided by Operating Activities + (Net Cash used by Investing Activities)

# Quarterly Highlights

Chroma

**2015.4Q Key Points**

- Sales Revenue: $ 1,193 million, down 12% QoQ, down 11% YoY
- Gross Margin: 57%
- Operating Margin: 20%
- Net Income: NT$ 250 million, down 48% QoQ, down 22% YoY
- 2015.4Q Highlights:
  - In the low season of fourth quarter, the Semiconductor testing solutions is major growth driver, presented a 14% growth QoQ.



# Year 2015.4Q Condensed Income Statement

| Condensed P&L – Parent Only (In Million NTD, except for EPS in NTD) | 2015.4Q | % | 2015.3Q | % | QoQ % | 2014.4Q | % | YoY % |
|---|---|---|---|---|---|---|---|---|
| **Net Sales** | **1,193** | **100%** | **1,356** | **100%** | **(12%)** | **1,345** | **100%** | **(11%)** |
| Cost of Goods Sold | (515) | (43%) | (610) | (45%) | **(16%)** | (664) | (49%) | **(22%)** |
| **Gross Profit** | **678** | **57%** | **746** | **55%** | **(9%)** | **681** | **51%** | **-** |
| Operating Expenses: | | | | | | | | |
| General & Administration | (237) | (20%) | (235) | (17%) | **1%** | (259) | (19%) | **(8%)** |
| Research & Development | (204) | (17%) | (207) | (16%) | **(1%)** | (213) | (16%) | **(4%)** |
| **Operating Income** | **237** | **20%** | **304** | **22%** | **(22%)** | **209** | **16%** | **13%** |
| Non-Operating Income (Expenses), net ● | 50 | 4% | 243 | 18% | **(79%)** | 142 | 10% | **(65%)** |
| Income (Loss) Before Tax | 287 | 24% | 547 | 40% | **(48%)** | 351 | 26% | **(18%)** |
| Income Tax | (37) | (3%) | (65) | (4%) | **(43%)** | (32) | (2%) | **16%** |
| **Net Income** | **$ 250** | **21%** | **$ 482** | **36%** | **(48%)** | **$ 319** | **24%** | **(22%)** |
| Other Comprehensive Income | (101) | (9%) | 141 | 10% | **n/a** | 103 | 7% | **n/a** |
| **Comprehensive Income** | **$ 149** | **12%** | **$ 623** | **46%** | **n/a** | **$ 422** | **31%** | **(65%)** |
| **EPS (Basic)** | **$ 0.66** | | **$ 1.28** | | **(48%)** | **$ 0.86** | | **(23%)** |
| **EPS (Diluted)** | **$ 0.62** | | **$ 1.20** | | **(48%)** | **$ 0.84** | | **(26%)** |

● Non-operating Income included 100% owned subsidiaries' income - New Material: 11m (QoQ ↓ 42%, YoY ↓ 42%), MAS: 15m (QoQ ↓ 29%, YoY ↓ 52%, ).

# Year 2015 Condensed Income Statement

| Condensed P&L – Parent Only (In Million NTD, except for EPS in NTD) | 2015 | % | 2014 | % | YoY % |
|---|---|---|---|---|---|
| **Net Sales** | **4,539** | **100%** | **5,135** | **100%** | **(12%)** |
| Cost of Goods Sold | (2,019) | (44%) | (2,382) | (46%) | **(15%)** |
| **Gross Profit** | **2,520** | **56%** | **2,753** | **54%** | **(8%)** |
| Operating Expenses: | | | | | |
| General & Administration | (910) | (20%) | (947) | (18%) | **(4%)** |
| Research & Development | (784) | (18%) | (754) | (15%) | **4%** |
| **Operating Income** | **826** | **18%** | **1,052** | **20%** | **(21%)** |
| Non-Operating Income (Expenses), net ● | 548 | 12% | 432 | 9% | **27%** |
| Income (Loss) Before Tax | 1,374 | 30% | 1,484 | 29% | **(7%)** |
| Income Tax | (137) | (3%) | (166) | (3%) | **(17%)** |
| **Net Income** | **$ 1,237** | **27%** | **$ 1,318** | **26%** | **(6%)** |
| Other Comprehensive Income | (134) | (3%) | 2 | - | **n/a** |
| **Comprehensive Income** | **$ 1,103** | **24%** | **$ 1,320** | **26%** | **(16%)** |
| **EPS (Basic)** | **$ 3.28** | | **$ 3.52** | | **(7%)** |
| **EPS (Diluted)** | **$ 3.10** | | **$ 3.31** | | **(6%)** |

● Non-operating Income included 100% owned subsidiaries' income - New Material: 50m (YoY ↓ 22%), MAS: 232m (YoY ↑ 102%).

# Balance Sheet Highlights & Financial Ratio

Chroma

| Parent Only (In Million NTD) | 2015. Dec | 2014. Dec | + / - % |
|---|---|---|---|
| **Balance Sheet Highlights** | | | |
| Cash & Short Term Investment | 2,703 | 2,168 | 25% |
| Inventory | 1,301 | 1,257 | 4% |
| Short Term Debt | 101 | 151 | - 33% |
| Long Term Debt | 2,988 | 2,361 | 27% |
| Shareholders Equity | 9,410 | 9,271 | 1% |
| **Total Assets** | **13,965** | **13,290** | **5%** |
| Inventory Turnover (Day) | 231 | 186 | |
| AR Turnover (Day) | 159 | 141 | |
| AP Turnover (Day) | 101 | 71 | |
| Net Debt to Equity (%) | 4% | 5% | |
| **ROE (%)** ● | **13%** | **15%** | |
| **ROA (%)** ● | **9%** | **11%** | |

| Cash Position | 2015.4Q | 2015.3Q | QoQ | 2015.A | YoY |
|---|---|---|---|---|---|
| EBITDA | 333 | 595 | (44%) | 1,561 | (6%) |
| Cash Flow from Operation | 718 | 198 | 263% | 1,523 | 85% |
| **Free Cash Flow** ●● | **423** | **254** | **67%** | **896** | **n/a** |

● All ROE + ROA has been annualized.

●● Free Cash Flow = Net Cash Provided by Operating Activities + (Net Cash used by Investing Activities)

# OPERATION

# HIGHLIGHT

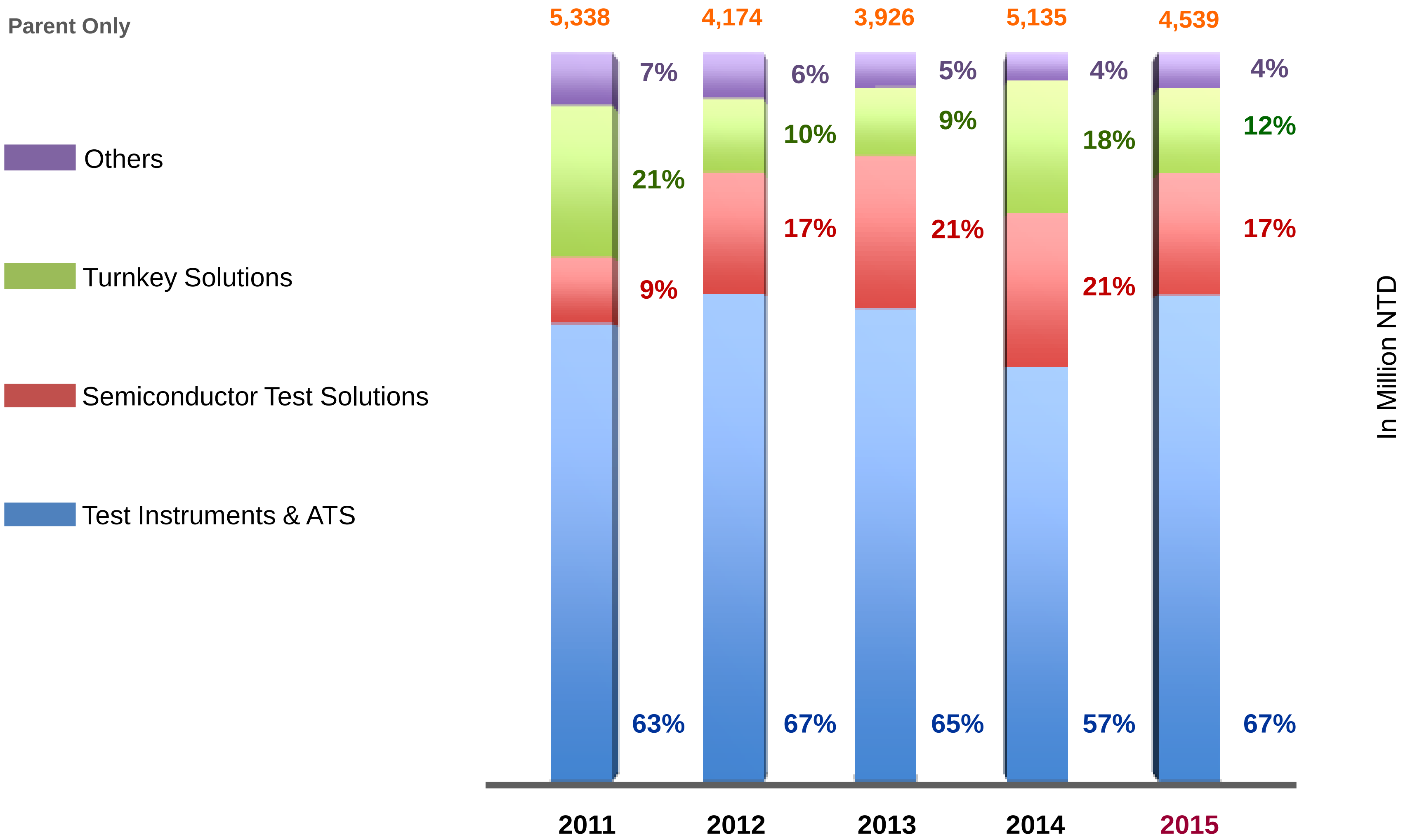
# Chroma Ate Inc. Sales Breakdown by Testing Solutions

| (Unit: Million NTD) | 2015.4Q | % | QoQ | 2014.4Q | % | YoY | 2015 | % | 2014 | % | YoY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Test Instruments & ATS** | 756 | 63% | (10%) | 810 | 60% | (7%) | 3,029 | 67% | 2,919 | 57% | 4% |
| **Semiconductor Test Solutions** | 225 | 19% | 14% | 291 | 22% | (23%) | 759 | 17% | 1,085 | 21% | (30%) |
| **Turnkey Solutions** | 142 | 12% | (45%) | 179 | 13% | (21%) | 532 | 12% | 935 | 18% | (43%) |
| **Service & Others** | 70 | 6% | 13% | 65 | 5% | 8% | 219 | 4% | 196 | 4% | 12% |
| **Total** | **1,193** | **100%** | **(12%)** | **1,345** | **100%** | **(11%)** | **4,539** | **100%** | **5,135** | **100%** | **(12%)** |

# Chroma Ate. Inc. Sales Mix Breakdown (YTD)

Chroma

## *A Turnkey Solution and Intelligent Automation Line Provider*



# Sales Breakdown by Consolidated Entities

| (Unit: Million NTD) | 2015.4Q | % | QoQ | 2014.4Q | % | YoY | 2015 | % | 2014 | % | YoY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Chroma Ate. Inc.** **included overseas affiliates** | 1,561 | 61% | (7%) | 1,667 | 64% | (6%) | 5,666 | 58% | 6,175 | 60% | (8%) |
| **MAS** | 309 | 12% | 143% | 201 | 8% | 54% | 1,261 | 13% | 680 | 7% | 85% |
| **New Material** | 583 | 23% | - | 623 | 24% | (6%) | 2,328 | 24% | 2,983 | 29% | (22%) |
| **Others** | 108 | 4% | (4%) | 116 | 4% | (7%) | 437 | 5% | 469 | 4% | (7%) |
| **Consolidated Sales** | **2,561** | **100%** | **3%** | **2,607** | **100%** | **(2%)** | **9,692** | **100%** | **10,307** | **100%** | **(6%)** |

# Year 2016 Guidance

- Due to sluggish economy and low capex sentiment, the Chroma parent sales revenues in year 2015 presented a decline of 12% compared to year 2014. The major decline is coming from Turnkey Solutions, which declined by 43% YoY. However, the core business of Test Instruments & ATS still presented a steady growth of 4% YoY, despite difficult market conditions.

- In January 2016, Chroma has acquired a 60% stake of Quantel, a Singapore incorporated test and measuring equipment distribution company. This further expands the Chroma's market penetration to Southeast Asia, after US, Europe and Japan markets.

- Moving into future, Chroma sees two industries as future growth opportunities – Semiconductor, an increasing demand for SLT and RF function tester due to more IoT and Auto IC applications and clean tech industries, a rising clean energy investment, particularly from EV related applications (Battery, motor and controller) and solar industry . The Company expected this will bring a sales growth to Semiconductor test solutions and tripling the sales to Turnkey Solutions in year 2016.

# Test Instruments & ATS (1/2)

Chroma

**TECHNOLOGY**

Automated Testing

System Integration, GB/T 18487.1
AC Type: 1~40KW,
DC Type: 10~200KW

System Integration
USB Power Delivery Emulator
Power/Comm./Protection Test

Power/Battery Testing

High Transient Linear Load: 10us
High Power Density: 6kW@4U

High Voltage Solar Array Simulator
Voc :1000 – 1500V , Isc: Up to 150A
Power Rating: 22kW – 225kW

Passive Comp. Testing

Impedance Measurement
Wide Freq. range: 30MHz

Impulse & Hi-pot test with Vacuum
7 in 1 (ACW/DCW/IR/IWT/DCR/L/Q Phase)

’15 ‘16

**MARKET**

EVSE/ Battery/ PV/ USB PD/ Monitor/3C Adapter & Charger/Portable & Wearable Device/ Motor

AC/DC EVSE ATS 8000

High Power DC Load
150~1200V,4~24kW
632XXA

USB PD Emulator

USB PD ATS 8020

1500V Solar Array Simulator

HF LCR Meter
11050-30M

Motor Stator Test System

**SOLUTION**

# Test Instruments & ATS (2/2)

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**TECHNOLOGY**

| | | |
|---|---|---|
| FPD Testing | 5K x 3K@60Hz<br>5.4Gbps lane rate | 8K x 4K@60Hz |
| Optical Testing | High Capacity Burn-in<br>Max. 1,280 DUT, up to 120℃ | High Temperature Uniformity<br>±0.5℃ temperature stability |
| PXI SMU/CMU | High Precision PXI DPS<br>4 CH/Slot, 600k sampling rate | High Precision PXI SMU/CMU<br>Ultra high resolution |

’15 ‘16

**MARKET**

HD Display/ Fiber Communication/ Mobile Phone/ Component Manufacturing/ Semiconductor/ LED

TO-CAN/CoC Burn In System 58603

FPD Tester 27014

PXI e SMU 52304

TOSA/BOSA Temp. Control System 58691

8K FPD Tester

PXIe SMU/CMU 52XXX

**SOLUTION**

# Semiconductor Test Solutions

**TECHNOLOGY**

| | |
|---|---|
| Logic Testing | High Parallel Sites Testing<br>1024 digital pins, 200Mbps — High Multi-site Testing<br>512 sites supported |
| Analog Testing | High parallel sites for ADC/DAC testing<br>16 bits 32 CH, 32 CH DIG, per card |
| IC Testing Handler | Thermal Engine<br>Nitro-TEC (Liquid Nitrogen) |

’15 ‘16

**MARKET**

IC – SoC/ MCU/ PMIC/ Sensors (touch-screen, fingerprint) / Connectivity (WiFi, BT)

High Density Instrument
HDADDA

Full Range Active
Thermal Control
Handler 3160-F

SoC Test System
3650-EX

**SOLUTION**

# Turnkey Solutions

Chroma

**TECHNOLOGY**

Automation

Battery Formation

MES

Integrated System Automation

Collaborative Robotic Application

Regenerative CH/DCH System , Negative Pressure Formation

Intelligent Process System

’15

‘16

**MARKET**

Industry 4.0 – Battery Cell Formation/ Battery Pack Auto Assembly/ IT/ICT Auto Test Line/ Smart Factory

Battery Pack Automatic Assembly Line

Smart Conveyer 5703


Automated Optical Measurement System


Intelligent Battery Process System

Battery Cell Formation System 17000

**SOLUTION**

let’s make a better world.

Thank You!